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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/527,509	03/10/2005	David B Fogel	NatSel-PCT01US	9951
31070 7590 04/25/2008 TIMOTHY N. ELLIS, PATENT ATTORNEY 8680 VIA MALLORCA, SUITE D LA JOLLA, CA 92037				
EXAMINER				
HOLMES, MICHAEL B				
ART UNIT		PAPER NUMBER		
2129				
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04/25/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/527,509

**Applicant(s)**

FOGEL, DAVID B

**Examiner**

Michael B. Holmes

**Art Unit**

2129

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE (3) MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-63 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-63 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_



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### Examiner's Detailed Office Action

1. This Office Action is responsive to communication received on 02/08/2008.
2. Amendment under 37 CFR § 1.111 reconsideration and allowance of application is respectfully requested by applicant. Applicant's arguments have been fully considered, however, they are not persuasive. The rejection under 35 U.S.C. § 101 & 35 U.S.C. § 102(b) stands and has been included below.

### Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. The invention as disclosed in claims 1-63 are rejected under 35 U.S.C. § 101 as being non-statutory subject matter. *see In re Comiskey*, Case No. 2006-1286, at 8, 16-21, (Fed. Cir., September 20, 2007). "Only if the requirements of § 101 are satisfied is the inventor allowed to pass through to the other requirements for patentability, such as novelty under § 102 and, non-obviousness under § 103." "Moreover, ... when an abstract concept has no claimed practical application, it is not patentable."

5. *No preemption is permitted* i.e., when a claim is so broad that it reads on both statutory and nonstatutory subject matter, *it must be amended*. A claim that recites a computer that solely calculates a mathematical formula is not statutory. In other words, one may not patent a process that comprises every “substantial practical application” of an abstract idea, because such a patent in “practical effect would be a patent on the [abstract idea] itself.” Regarding claims 1-63 “a method for identifying at least one property of data” would in fact cover virtually all forms of data or information identification. Nothing is specified in the claims to limit the invention to a particular application e.g., an Accounting systems; Alliance management systems; Asset management systems; Brand management systems; Budgeting/financial planning systems; Business intelligence systems; Call management systems; Cash management systems; Channel management systems; Commodity risk management systems; Content management systems; Contract management systems; Credit-risk management system Customer relationship management systems; Data integration systems; Demand chain systems; Decision support systems; Document management systems; Email management systems; Employee relationship management systems; Energy risk management systems; Executive dashboard systems; Expense report processing systems; Fleet management systems; Fraud management systems; Freight management systems; Human capital management systems; Human resource management systems; Incentive management systems; Innovation management systems; Insurance management systems; Intellectual property management systems; Intelligent storage systems Interest rate risk management systems; Investor relationship management systems; Knowledge management systems; Learning management systems; Location management systems; Maintenance management systems; Material requirement planning systems; Metrics creation system; Online analytical pro-

cessing systems; Ontology management systems; Partner relationship management systems; Payroll systems; Performance management systems; (for IT assets) Price optimization systems; Process management systems; Product life-cycle management systems; Project management systems; Project portfolio management systems; Revenue management systems; Risk management information system Risk simulation systems; Sales force automation systems; Scorecard systems; Sensor grid systems; Service management systems; Six-sigma quality management systems; Strategic planning systems; Supply chain systems; Supplier relationship management systems; Support chain systems; Taxonomy development systems; Technology chain systems; Unstructured data management systems; Visitor (web site) relationship management systems; Weather risk management systems; Workforce management systems; or Yield management systems. Without clearly stating in the claim a particular application, it *preempts* all forms of data or information identification. Where as, the courts have also held that a claim may not preempt ideas, laws of nature or natural phenomena. The concern over preemption was expressed as early as 1852. See Le Roy v. Tatham, 55 U.S. (14 How.) 156, 175 (1852) (“A principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right.”); See Funk Bros. Seed Co. v. Kalo Inoculant Co., 333 U.S.127, 132, 76 USPQ 280, 282 (1948).

6. The claims fail to provide a “useful, concrete or tangible result.” Moreover, there must be a practical application, by either (1) transforming (physical thing) or (2) by having the **FINAL RESULT** (not the steps) achieve or produce a “useful” (specific, substantial, AND credible), “concrete” (substantially repeatable/non-unpredictable), AND “tangible” (real world/non-abstract) result. Moreover, the claims are directed to an abstract idea rather

than a practical application of an abstract idea which would produce a “useful, concrete or tangible results.” Accordingly, the claims fail to provide a practical application and is insufficient to establish a real world “tangible” result, *see In re Warmerdam*, 31 USPQ2d, 1354.

7. Devoid of such, applicant’s claimed invention is an abstract idea e.g., a computational model or a mathematical manipulation of a function or equation. A process that merely manipulates an abstract idea or performs a purely mathematical algorithm is non-statutory despite the fact that it might inherently have some usefulness. *see In re Sarkar*, 588 F.2d at 1335, 200 USPQ at 139, wherein the court explained why this approach must be followed:

No mathematical equation can be used, as a practical matter, without establishing and substituting values for the variables expressed therein. Substitution of values dictated by the formula has thus been viewed as a form of mathematical step. If the steps of gathering and substituting values were alone sufficient, every mathematical equation, formula, or algorithm having any practical use would be per se subject to patenting as a “process” under 101. Consideration of whether the substitution of specific values is enough to convert the disembodied ideas present in the formula into an embodiment of those ideas, or into an application of the formula, is foreclosed by the current state of the law.

8. A claim is limited to a practical application when the invention as claimed, produces a concrete, tangible and useful result; i.e., the invention recites a steps or a process or act of producing something that is concrete, tangible and useful. *See AT & T*, 172 F.3d at 1358, 50 USPQ2d at 1452. *See* MPEP § 2106(IV) The claimed invention as a whole must accomplish a practical application. That is, it must produce a “useful, concrete and tangible result.” *State Street*, 149 F.3d at 1373, 47 USPQ2d at 1601-02. Remember, the claims define the property rights provided by a patent, and thus require careful scrutiny. Therefore, it is not enough to set forth invention in the specification. The claims must also reflect the scope and breath of applicant’s invention. *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551(CCPA 1969). The

situation in this application appears to be more difficult since it does not appear that the practical application is contained within the specification.

### Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1, 39, 44, 57, 58 & 60 – 63 are rejected under 35 U.S.C. 102(b) as being anticipated by *Hutchison* (USPN 5,802,506).

Regarding claims 1, 39, 44, 57, 58 & 60 – 63.

*Hutchison* discloses a signal bearing medium tangibly embodying a program of machine-readable instructions executable by a digital processing apparatus to perform a method for identifying at least one property of data, the method comprising the following operations:

receiving data; [C 4, L 60, to C 5, L 55, FIG. 4, C 8, L 25 to C 9, L 33]

making assessments regarding the data; [C 4, L 60, to C 5, L 55, FIG. 4, C 8, L 25 to C 9, L 33]

applying at least one behavioral operator; [C 4, L 60, to C 5, L 55, FIG. 4, C 8, L 25 to C 9, L 33]

analyzing the data, wherein the operation of analyzing the data comprises detecting if there are any anomalies in the data; [C 4, L 60, to C 5, L 55, FIG. 4, C 8, L 25 to C 9, L 33]

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outputting results; [C 4, L 60, to C 5, L 55, FIG. 4, C 8, L 25 to C 9, L 33]

receiving feedback concerning system performance; [see C 4, L 60, to C 5, L 55, FIG. 4, C 8, L 25 to C 9, L 45]

receiving feedback regarding the outputted results; [C 4, L 60, to C 5, L 55, FIG. 4, C 8, L 25 to C 9, L 45]

adjusting at least one parameter based on the feedback received concerning system performance, wherein the at least one parameter is a parameter of a machine learning method; [C 4, L 60, to C 5, L 55, FIG. 4, C 8, L 25 to C 9, L 45]

checking integrity of the data; [C 4, L 60, to C 5, L 55, FIG. 4, C 8, L 25 to C 9, L 45]

adjusting at least one behavioral operator based on the feedback received regarding the outputted results; [C 4, L 60, to C 5, L 55, FIG. 4, C 8, L 25 to C 9, L 45] and

analyzing the data, wherein the operation of analyzing the data comprises generating at least one machine generated mathematical model to explain outcomes. [C 4, L 60, to C 5, L 55, FIG. 4, C 8, L 25 to C 9, L 33]

### Claim Objection(s)

11. Claims 2-38, 40-43, 45-49 & 59 is/are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.



## Allowable Subject Matter

12. Allowance of claims 50-56 are dependent upon the resolution of the outstanding issues shrouding 35 U.S.C. § 101.

## Examiners Summary

13. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

14. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

## Correspondence Information

15. Any inquires concerning this communication or earlier communications from the examiner should be directed to Michael B. Holmes, who may be reached Monday through Friday, between 8:00 a.m. and 5:00 p.m. EST. or via telephone at (571) 272-3686 or facsimile transmission (571) 273-3686 or email [michael.holmesb@uspto.gov](mailto:michael.holmesb@uspto.gov).

If you need to send an Official facsimile transmission, please send it to (571) 273-8300. If attempts to reach the examiner are unsuccessful the Examiner's Supervisor, David Vincent, may be reached at (571) 272-3080.

Hand-delivered responses should be delivered to the Receptionist @ (Customer Service Window Randolph Building 401 Dulany Street Alexandria, VA 22313), located on the first floor of the south side of the Randolph Building.

Finally, information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Moreover, status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) toll-free @ 1-866-217-9197.

**Michael B. Holmes**  
Primary Examiner  
Artificial Intelligence  
Art Unit 2129  
United States Department of Commerce  
Patent & Trademark Office

*Thursday, April 24, 2008*

*MBH*

*/Michael B. Holmes/  
Primary Examiner, Art Unit 2129*